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FAX

To: Asghar Bilgrami, USPTO  
Art unit 2143

FAX to 571-273-8300

From: N. K. Ouchi

Ref: 09/930,933

14 Pages plus cover letter

Date January 16, 2007


Examiner Bilgrami

Per our phone discussion of January 11, 2007, I am submitting an addendum to my previous response of February 19, 2005. The addendum includes additional discussion, an updated Summary, and new claims.

If the submission is not in the proper form, please let me know since I was on my cell phone and had to prepare the response based on my recollection of the call.

If you have any questions or would like clarification/discussion, my phone number is 408-757-5862.

Thank you for your assistance.

 1/16/2007  
N. K. Ouchi,  
Inventor

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Addendum to Response FAXed February 19, 2005  
In Response to USPTO Office Action Mailed 11/19/2004

Confirmation Number: 2272

Examiner: Asghar Bilgrami

Art Unit: 2143

Title: Information Transfer Protocol System and Private Exchange

Application Number: 09/930,933

Inventor: Norman Ken Ouchi

January 16, 2007

Examiner Bilgrami

The inventor sincerely appreciates the opportunity to respond.

Examiner Scott Jarrett recommended that I review the claims for all my applications since many of my original claims do not appear to clearly claim the invention and would not meet the requirements for claims independent of prior art. Examiner Jarrett has not viewed these claims since his recommendation was based on claims I submitted for another application.

Please consider an amended SUMMARY and new claims to replace the claims in the previous office action response of February 19, 2005.

Further Discussion of the Invention and the Prior Art.

The discussion in the February 19, 2005 response of the prior art and difference with the present invention is still applicable. The discussion identifying claims 1-21 is not applicable since new claims are submitted.

This further discussion is to summarize and more clarify the present invention. The objective of the present invention is to provide more cost and time effective implementation of complex business-to-business processes that use inter-business communication networks including the Internet. Less complex business processes are defined without states, state-less, while more complex processes require states. An example of a state-less process is the transmission of a

Information Transfer Protocol System and Private Exchange  
Application No. 09/930,933 N. K. Ouchi 1/16/2007 Page 1 of 14

purchase order where the recipient may accept the purchase order or reject the purchase order. The state-less process does not require the communication messages to be state dependent.

A more complex process requiring states is a purchase order with negotiation of price, quantity, or delivery date. The recipient may accept the purchase order, reject the purchase order, or propose an alternative to the original purchase order. The purchase order has state in that both the sender and recipient are aware of the state of the negotiation and who is to respond. The messages used to communicate are state dependent.

At a macro level, most business processes have states even if the micro steps, e.g. purchase order process, is state-less. For example, if the purchase order is accepted, both sender and recipient are in a state where the recipient is expected to deliver the ordered item to the sender (fulfillment). Once delivered, the subsequent state is where the sender will pay the recipient for the delivered item. The state of an order using the prior art is kept in the systems of record or business systems, including Enterprise Resource Planning (ERP), warehouse, and fulfillment systems, of the sender and recipient.

Electronic Data Interchange, EDI, standard defines a set of state-less messages. EDI has been effective for a set of industries but many industries require the more complex business processes that require state.

State dependent processes and messages have been defined for some of these industries. RosettaNet is an example for the electronics industry. However, the prior art implementations of RosettaNet follow the model used for EDI where the messages are transacted in the systems of record. In the prior art, some of the message level transactions are processed in third party systems but the state dependent functions are processed the systems of record. Most systems of record do not provide the state dependent functions for negotiation or other process that require state. Since the systems of record are different for each trading partner, the state process implementations are different. In addition, macro level business processes, e.g. the order followed by delivery in the example, require the systems of record of both trading partners to have similar

capabilities and for the state of the macro level transaction to flow between these systems. For example, the order flows from the ERP system to the warehouse system to the fulfillment system for delivery. In most cases, trading partners have different system capabilities, the systems may not be integrated to flow state from system to system, and some trading partners may not have systems of record for all states in the macro process. Each trading partner implements their side of the processes depending on their internal systems of record capabilities. Hence, each implementation may behave differently and point to point testing is required between each pair of trading partners to assure interoperability. In addition, each implementation requires extensive analysis and testing of error conditions. The results are complex, error prone, long, expensive implementations.

The present invention provides the state for each active process, means to change the state to the next state of the process, the data required for each message, and means, including web pages, to process each message. The users interact with the present invention using these web pages where a web page contains all the information the user requires to respond to the message. The response determines the next state of the process.

The macro level processes, e.g. purchase order, fulfillment, and payment, implementations are complete and consistent with the business-to-business processes.

The consistency of implementation removes the requirement of point-to-point testing. Trading partners can begin use of the state processes in minutes. Further, while a simple business could conduct transactions with trading partners using the web pages provided by present invention, many companies have systems of record that need the information to complete the internal process for a transaction and provide the information for the response transaction. The present invention provides means for selective transfer information between the web page and the systems of record. Note that a trading partner may not have a system of record for every process and the present invention provides the

function of the missing system of record. The present invention also provides the flow of state so integration of the systems of record is not required.

Further, the transfer of information may be automated for transactions that meet criteria for a "good" transaction. Hence, "good" transactions may be automated easily and the "not good" transactions processed using the present invention web pages. Hence, the analysis for integration to the systems of record does not require extensive error detection and response but only requires the easier definition of "good" transactions. The integration to the systems of record can be done accurately and quickly.

The present invention provides significant advantages over the prior art implementations of state dependent business-to-business processes.

The attached amended SUMMARY does not add new matter but to describe the invention in a more accurate form.

Claims are attached for submission.

Claims 1-21 are cancelled. New Claims are grouped 22-30, 31-34, 35-41 where claims 22, 31, and 35 are independent claims.

I have signed this page so that the attached claims will be in their own set of pages.

Respectfully submitted

 1/16/2007  
Norman Ken Ouchi

Information Transfer Protocol System and Private Exchange  
Application No. 09/930,933 N. K. Ouchi 1/16/2007 Page 4 of 14

**Amended SUMMARY**

The present invention provides means to rapidly implement a Business to Business (B2B) Protocol which defines the processes for business transactions between trading partners. The B2B Protocol further defines the state behavior for each business process and the state dependent messages including the message data. The present invention provides the state of a process, means to change the current state to the next state, storage for message data, and web screens to process the data such that a trading partner may participate in B2B transactions with another trading partner using the web screens. The present invention provides means to easily, quickly, and accurately integrate with the internal systems of record, e.g. Enterprise Resource Planning (ERP), warehouse, and fulfillment systems by determining "good" transactions and automating these transactions. Transactions that are not "good" are processed manually using the web screens.